

REMARKS

By this submission accompanying with a request for continued examination, claims 3 and 9 are amended. No new matter is contained in the amendments. Accordingly, claims 3, 9, 11 and 12 are pending in this application and claims 3, 9, 11 and 12 are respectfully submitted for a timely examination.

Claims 3, 9, 11 and 12 Rejected under 35 U.S.C. § 103(a)

The Office Action rejected claims 3, 9, 11 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Takahashi et al. (U.S. Patent No. 5,504,701, hereinafter "Takahashi") in view of Shi et al. (U.S. Patent No. 6,415,386 B1, hereinafter "Shi") and Oruc et al. (U.S. Patent No. 5,270,956 A, hereinafter "Oruc"). This rejection is respectfully traversed.

Claim 3, as amended, recites a point storing member comprising, among other features, a controller coupled to the first cryptogram storing portion and to the second cryptogram storing portion, and configured to receive an external cryptogram; a data converting unit configured to convert the first cryptogram stored in the first cryptogram storing portion; a comparator configured to combine the converted first cryptogram with the second cryptogram and generating a combined cryptogram; and a point changing means for changing the points when said combined cryptogram matches with said external cryptogram.

Claim 9, as amended, recites a point storing member comprising, converting mean for converting said first cryptogram into a converted first cryptogram data; cryptogram collating means for combining the converted first cryptogram data with the second cryptogram and generating a combined cryptogram; comparing means for

comparing the data to be verified and received via the receiving means with the combined cryptogram. The changing means changes the points stored in the storing means based on a predetermined result from the comparison by the comparing means.

It is respectfully submitted that the prior art fails to disclose or suggest at least the above-mentioned features of the Applicants' invention.

One embodiment of the present invention provides a point storing member 1 having a controller 60 and a memory portion 50 where the memory portion 50 includes a point area 51, a setting information area 52, a secret information area 53 and a secret data area 54, as illustrated for example in Figure 3. The point area 51 is an area for storing points. The secret data area 53 is an area for storing a cryptogram of an IC card user, and the secret data area 54 is an area for storing secret data of an IC card manufacturer. The controller 60 includes at least a cryptogram collating portion 63.

The cryptogram collating portion 63, in one embodiment of the present invention, has comparators 71 and 73, and a data converting circuit 75, also shown for example in Figure 3. In one example, when secret data area 54 has stored a cryptogram "10100000" and the IC card user has stored "1010" in secret data area 53 as his/her own cryptogram or pass word, collation of the cryptogram is collated. The data converting circuit 75 converts the cryptogram "10100000" in the secret data area 54, which can result in a converted cryptogram of "0101111." Thereafter, the comparator 72 is supplied with a cryptogram "10100101111," which is a combination of the cryptogram "1010" of the IC card user stored in secret data area 53 and "0101111" following the cryptogram "1010." The comparator 71, for example, determines whether

the input data applied from the main controller 69 for collation matches with the above cryptogram "101001011111" or not.

Hence, according to at least the above example of the embodiment, the cryptogram of secret data 54 is converted and added to the cryptogram in secret data area 53 for comparison with the cryptogram data applied from main controller 69 for collation.

Accordingly, the present invention provides the advantage where the IC card manufacturer can store the cryptograms, which are different from each other and are dedicated to the IC card users, respectively, in secret data areas 53. Thereby, no confusion occurs even when two IC card users accidentally stored the same cryptogram in secret data areas 53, respectively. Thus, one of the users cannot erase the data in the IC card of the other user.

Applicants submit that Takahashi in view of Shi and further in view of Oruc fail to disclose or suggest each and every element recited in claims 3 and 9 of the present application. In particular, it is submitted that the combination of the memory card of Takahashi, with the cryptogram lock system of Shi, and with the system and method for performing fast algebraic operations on a permutation network of Oruc is neither comparable nor analogous to the portable point storing member of the present invention.

For instance, it is submitted that neither Takahashi, Shi nor Oruc discloses at least a data converting unit configured to convert the first cryptogram stored in said first cryptogram storing portion, and a comparator configured to combine the converted first cryptogram with said second cryptogram and generating a combined cryptogram, as

recited in claim 3, and at least a converting mean for converting the first cryptogram into a converted first cryptogram data, and a cryptogram collating means for combining the converted first cryptogram data with the second cryptogram and generating a combined cryptogram as recited in claim 9 of the present application.

Therefore, Applicants submit that the cited prior art fails to disclose each and every element recited in claims 3 and 9 of the present application.

To establish *prima facie* obviousness, each feature of a rejected claim must be taught or suggested by the applied art of record. See M.P.E.P. §2143.03 and In re Royka, 490 F.2d 981 (CCPA 1974). As explained above, Takahashi in view of Shi and further in view of Oruc do not teach or suggest each feature recited in claims 3 and 9. Accordingly, for the above provided reasons, Applicants respectfully submit that claims 3 and 9 are not rendered obvious under 35 U.S.C. § 103 by the teachings of Takahashi in view of Shi and further in view of Oruc, and therefore are allowable.

As claim 11 depends from claim 3, and claim 12 depends from claim 9, Applicants submit that each of these claims incorporates the patentable aspects therein, and are therefore allowable for at least the reasons set forth above with respect to the independent claims, as well as for the additional subject matter recited therein.

Under U.S. patent practice, the PTO has the burden under §103 to establish a *prima facie* case of obviousness. In re Fine, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Both the case law of the Federal Circuit and the PTO itself have made clear that where a modification must be made to the prior art to reject or invalidate a claim under §103, there must be a showing of proper motivation to do so. The mere fact that a prior art reference could arguably be modified to meet the claim is insufficient to establish

obviousness. The PTO can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. Id. In order to establish obviousness, there must be a suggestion or motivation in the reference to do so. See also In re Gordon, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (prior art could not be turned upside down without motivation to do so); In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1998); In re Dembiczak, 175 F.3d 994 (Fed. Cir. 1999); In re Lee, 277 F.3d 1338 (Fed. Cir. 2002). The Office Action restates the advantages of the present invention to justify the combination of references. There is, however, nothing in the applied references to evidence the desirability of these advantages in the disclosed structure.

Applicants respectfully request withdrawal of the rejection.

Conclusion

In view of the above, Applicants respectfully submit that each of claims 3, 9, 11 and 12 recites subject matter that is neither disclosed nor suggested in the cited prior art. Applicants also submit that the subject matter is more than sufficient to render the claims non-obvious to a person of ordinary skill in the art, and therefore respectfully request that claims 3, 9, 11 and 12 be found allowable and that this application be passed to issue.

If for any reason, the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper has not been timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, referring to client-matter number 100806-09020.

Respectfully submitted,



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